084234-0104

## ABSTRACT

A network system for carrying out communication between a control station and a plurality of devices connected to a network. The ~~, wherein such~~ communication includes data communication which requires real-time attributes and message communication which does not require real-time attributes. The ~~, and wherein the~~ data communication includes a first data communication ~~in which data is transmitted from the control station to the devices and data in response to this transmission is transmitted from the devices to the control station~~, and a second data communication ~~in which data is transmitted from the control station at a prescribed timing,~~ The system includes a plurality of transmission queues for temporarily storing transmission data provided in the control station, wherein one of the queues holds transmission data for the second communication. After ~~; wherein after~~ the first data communication is carried out in accordance with a predetermined cycle time, an appropriate switching between the message communication and the second communication is carried out in the remaining time of the cycle time to complete one cycle, whereafter the cycle is repeatedly carried out.

002.1424897.1